# Astragalus australis (L.) Lam. var. olympicus Isely Cotton's milk-vetch Fabaceae (Pea Family)

Status: State Threatened, USFWS Species of Concern

Rank: G5T2S2

**General Description:** Perennial, with a grayish covering of hairs. Leaves comprised of 11 to 17 leaflets. Flowers creamy-white with a purplish tinge on the keel. Pod smooth, inflated, 1 inch by ½ inch, reddish amber at maturity. Stems 5 to 10 inches long.

**Identification Tips:** Astragalus australis var. olympicus is one of only two taxa in the genus Astragalus known to occur in the Olympic Mountains of Washington. The other is Astragalus microcystis, which does not have the characteristic large, swollen, reddish pods and does not occur within the known range of Astragalus australis var. olympicus.

Phenology: Identifiable June to September.

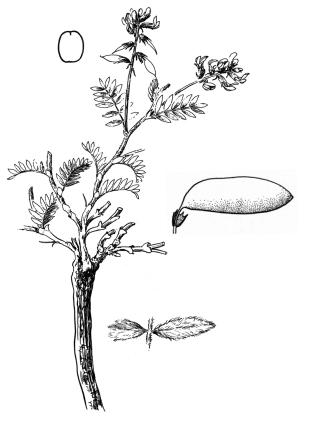
**Range:** The total range of this taxon is a portion of the northeast Olympic Mountains in Clallam County about 10 miles wide and 20 miles long.

Habitat: High elevations on unstable talus/scree slopes and ridges with a mostly southerly or westerly aspect confined to porous (shot-size) gravelly-sandy soils rich in limestone. Associated vegetation is usually sparse, but may include scalloped onion (*Allium crenulatum*), western sagebrush (*Artemisia ludoviciana*), dwarf hawksbeard (*Crepis nana*), sand-dwelling wallflower (*Erysimum arenicola*), dwarf mountain fleabane (*Erigeron compositus*), woolly sunflower (*Eriophyllum lanatum*), silky phacelia (*Phacelia sericea*), spreading phlox (*Phlox diffusa*), sticky crazyweed (*Oxytropis viscida*), mountain juniper (*Juniperus communis*), Davidson's penstemon (*Penstemon davidsonii*), Idaho fescue (*Festuca idahoensis*), and rosy pussytoes (*Antennaria microphylla*). Elevation 4800 to 6000 feet. Occurs within the Arctic-Alpine Zone of Franklin and Dyrness (1973).

**Ecology:** On the steeper slopes, this species is probably subjected to a fair amount of sliding and downhill creep. Due to the sparseness of vegetation, there is probably considerable frost heaving of soils in late winter and early spring. This may keep other species from becoming established and competing with *Astragalus australis* var. *olympicus*.

#### Astragalus australis var. olympicus

Cotton's milk vetch



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Known distribution of Astragalus australis var. olympicus in Washington

• Current (1980+)

O Historic (older than 1980)

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**State Status Comments:** Small range and small population size contribute to the species' status in Washington.

**Inventory Needs:** Monitoring known occurrences for population trends should remain a high priority. Additional field searches should be conducted to locate possible new populations.

Threats and Management Concerns: Disturbance from mountain goats (not native) and trampling by hikers are potential threats.

Comments: Synonymous with Astragalus cottonii Jones.

#### References:

Buckingham, N.M., E.G. Schreiner, T.N. Kaye, J.E. Burger, and E.L. Tisch. 1995. *Flora of the Olympic Peninsula*. Northwest Interpretive Association, Seattle. 199p.

Franklin, J.F. and C.T. Dyrness. 1973. *Natural vegetation of Oregon and Washington*. U.S.D.A. Forest Service General Technical Report PNW-8. 417p.

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Kaye, T. 1989. Autecology, reproductive ecology, and demography of *Astragalus australis* var. *olympicus* (Fabaceae). Masters Thesis, Oregon State University. 114p.